



COLORADO SPRINGS,
COLORADO

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DECEMBER 1995



Amateur Radio News Service

Pikes Peak Radio Amateur Association, Inc.
P. O. Box 16521
Colorado Springs, Colorado 80935

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Ø BEAT



Pikes Peak Radio Amateur Association Officers and Directors

President—	Rob Roller	WB7WHT	4846 Herndon Circle	80920	282-0204
Vice-President—	Doug Moloney	WBØMHP	3817 Vaquero Circle S.	80913	590-2767
Secretary—	Warren Hickey	WØYNE	12895 Tia Lane	80908	495-0471
Treasurer—					
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Board Member—	Ron Deutsch	NKØP	4305 Ridgeline Drive	80919	693-8362
Board Member—	Jeff Ryan	NØWPA	6721 Northface Lane	80919	280-8826
Board Member—	Gloria Ryan	NØZFX	6721 Northface Lane	80919	280-8826
Board Member—	Harry Russell	NØSFP	11710 Tracy Lane, Peyton	80831	749-0244

Ø-BEAT is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc., PO Box 16521, Colorado Springs, Colorado 80935. For membership and subscription information see the last page of this publication. The Pikes Peak Radio Amateur Association meets monthly on the second Wednesday of each month at the Disabled American Veterans Hall, Chapter 26, 6880 Palmer Park Blvd. at 7 PM.

Deadline for submission of articles or advertisements is the 20th of each month. Submissions are accepted in any form, however electronic submission (on disk, or via the electronic mail) is preferred. Articles should be sent directly to the Ø-BEAT Editor. Permission is granted to reprint articles provided credit is given to both the author and this publication.

Monthly advertising rates: Full page \$48; half page \$24; quarter page \$12; business card \$6. These rates are billed quarterly. Send your advertisement requests and payments to: PPRAA, PO Box 16521, Colorado Springs, Colorado 80935.

Committee Chairpersons & Other Club Contacts

Activity	Doug Moloney	590-2757
Auditing		
Historian		
Interference	Bill Petty	591-2116
Membership	Les Borst	634-3995
Programs	Doug Moloney	590-2757
Publicity	Aaron Pelouze	282-9715
Public Service	Mike Stansberry	636-1290
Swapfest	Harvey Hunter	597-8964
Technical Instruction	Al Bailey	597-8514
Trailer Custodian	Harry Russell	749-0244
VE Testing	Erik Mugele	596-5345
Ø-Beat Editor	Jeff Boyes	633-5650
ARES Liaison	Mike Stansberry	636-1290
CCARC Liaison	Cory Nelson	528-6696
RACES Liaison	Doug Jarmuth	520-0456
Skywarn Liaison	Steve Westby	570-1070

Reminder — December Meeting

The next meeting of the PPRAA will be on
Wednesday, December 13th
at the Disabled American Veterans Hall,
6880 Palmer Park Blvd.
The meeting will start at 7 PM.



Radio Exams

Radio exams sponsored by the PPRAA are held on the 2nd Saturday of February, April, June, August, October, and December. Testing takes place at 9 A.M. at:

Denver Technical College
225 South Union
Colorado Springs

Everyone is seated on a walk-in basis. Those wishing to take an examination should bring the following items:

1. \$5.90 (preferably a check or money order made out to ARRL/VEC) for any exam other than element 1A or 2.
2. Picture identification.
3. A copy of your current amateur radio license, and/or a copy of any examination credit you have as well as the signed original. We keep the copies.
4. A pen, pencils, and a calculator if you need one.

If you have any further questions please call Erik Mugele, KGØXE at 596-5345. Please do not call Denver Technical College.

**Words from the President:
WB7 Whatta Happy Thanksgiving I had.**

Or will have. Even though I'm writing this before Thanksgiving, I know I'll have put on a few pounds by the time you read this. But, isn't that what it's all? Giving thanks for family, friends and great food! The "friends" include all of my amateur radio friends, too, so let me say thanks to all of you that have contributed many hours toward improving amateur radio in the Pikes Peak region. It would be difficult to name all of you (our roster lists over 240 members!) so I won't even try. But look at all the work you've done this year. The annual Hamfest, VE testing, amateur radio classes, the picnic, Field Day, ARES public service events, the Library Fair, and much more, as well as all the many unseen actions that go unnoticed.

So what could possibly follow this great year we just had? The Christmas Party, that's what! Rosie Calaway, WA0MNL, and Jody Borst, KA0ROZ, are putting together this year's Christmas extravaganza, which will be held in conjunction with the next PPRAA meeting. But before you can feast on that fine food, we'll have to take care of some club business.

Last month I regrettably accepted the resignation of Gerald Nieman, KB0SHM, for the position of Treasurer. Gerald resigned for personal reasons. So be prepared to vote for a new treasurer. Meanwhile, if you've been thinking about what you can do for the club, why not volunteer to be nominated for Treasurer? As of this writing I don't know of any nominations for the position but I hope to have quite a list of volunteers by meeting night! Call me or one of the board members!

So I look forward to seeing all of you and your families at the Christmas Party, on the thirtieth anniversary of the incorporation of the Pikes Peak Radio Amateur Association. That's right, on December 14, 1965, the Articles of Incorporation were signed by the officers at that time. The PPRAA has been around longer than that, of course, and I'm sure will continue for a long time to come. Happy Holidays! Rob, WB7WHT.



OM/YL LUNCH BUNCH

The next Lunch Bunch meeting will be December 21st at the New Country Buffet at 7655 N. Academy Blvd. This restaurant is fairly new. We have been promised the Meeting Room, so be sure and ask for that when you arrive.

For Christmas, we decided to have a gift exchange. If you want to join in the exchange, bring a gift (value around \$3.00)...mark it for OM or YL. Be sure to include your name with the gift when you wrap it so that the recipient can thank you.

We have a fun time at our get-togethers and everyone is cordially invited...you buy your own lunch...relax...visit and enjoy the company of some mighty nice people. See Ya!

73's
Rosie Calaway, WA0MNL
471-9965

P.S. Note I didn't say XYL...I'll never be an X.....

PPRAA Christmas Party!

The annual Christmas Party will be held December 13th (regular meeting night.)

Beginning at 6:30 PM, the DAV Auxiliary will be serving the food. The menu will consist of bread rolls, cold cuts, potato salad, veggie tray, chips and dip. Coffee and punch, along with dessert, will also be furnished.

Each person will be required to have a ticket for the meal. These will be available upon your arrival. There will be no charge for club members, and each member may bring one guest without charge. All other guests over the age of 7 will be asked to pay \$2.00.

Any questions? Please call one of the following:

WA0MNL, Rosie - 471-9965 or
KA0ROZ, Jody - 634-3995

**General Membership Meeting Minutes
November 7, 1996**

The general membership meeting was opened at 7:00 p.m. by the President, Rob Roller, WB7WHT upon determining a quorum of the membership was present. Members and guests introduced themselves. One newly licensed amateur was welcomed into our Amateur Radio fraternity.

The treasurer report was given by Warren, WØYNE. Last months balance was \$4288.25, and \$24.75 was paid out. This left a balance of \$4263.50. The report was accepted. The minutes of the October 11, meeting, as published in the Ø-beat, were approved as amended by changing a reference for the Christmas Party contact from Rob to Doug Moloney.

Committee Reports:

A.R.E.S. Liaison: Jeff, NØWPA, reported on A.R.E.S. activities. Jeff briefed the members on the recent exercise at the AFA. Amateur Radio was well represented and was well received by the AF personnel.

Membership: Les reminded us that by renewing our ARRL Membership through the PPRAA, the club is allowed to keep \$2.00 for each renewal.

Public Service: All is quiet.

Interference: Bill Petty, NØHJX, had no interference incidents to brief this month.

Ø-BEAT: Everyone was reminded that the cutoff date for every Ø-BEAT is the 20th of each month.

Programs: Doug, WBØMHP, announced that the December meeting topic would be the Christmas Party and January will be homebrew night, so start working on projects now.

CCARC: No report.

Publicity: The members were asked by the president for help in the area of publicity. We need a chairman to head up this vital area. Publicity is important. We must keep the public aware of what Amateur Radio is and does for the community.

Old Business:

Rob talked about the Jamboree-On-the Air and how Rick Brown, KDØSU had set up a demonstration station at the East Library and Fred, KAØWIE, worked with a group at Fort Carson. There were lots of Scouts who got a chance to talk on the radio.

New Business:

Bob, WA4SVJ, asked for support in the technical areas. He is looking for some amateurs who would like to help out others who are just starting or who might be going in

a new mode of operation. Those interested in helping should contact Bob.

Doug, WBØMHP, conducted a brainstorming session for ideas for future membership night programs. About 55 ideas were put forth by the members. These will be listed in next months Ø- Beat. Everyone should read these over and think about the order they would like them to be presented.

The Hammy Award was presented by Mary, KBØSHT, to Kalani, KBØODK. He is one of our newer amateurs and has been active in helping others. Congratulation to a deserving Ham.

Next Board meeting will be held at Ron, NKØP's home on Monday, Nov. 13th at 7:00 p.m. If you intend to attend please let Ron know.

Respectfully submitted by Warren, WØYNE, Secretary

**Board Meeting Minutes
November 13, 1996**

The Board Meeting held, was opened at 1900 hours by the president, Rob Roller at the home of Ron, NKØP. Members present were Rob, WB7WHT; Doug, WBØMHP; Jeff, NØJLH; Warren, WØYNE; Jeff, NØWPA; Gloria, NØZFX; Ron, NKØP; and Harry, NØSFP. Guests present were Les, KCØNC; Jody, KAØROZ; Renay, KAØROY; Aaron Peluze, KØFLM and David Russell.

The board discussed the monthly meeting programs based on the brainstorming session that Doug had conducted at the last membership meeting. These will continue to be developed in future meetings. Our December meeting will be our annual Christmas party. Jody discussed the cost associated with having the DAV cater the affair. After a discussion a motion was made by Jeff and seconded by Harry that the PPRAA allocate \$25Ø for the party which will be catered by the DAV. The motion carried. Jeff, NØWPA, will be the master of ceremonies.

January's program will be "Homebrew Night". There will be several categories with first and second prizes in each category. Board members without entries will select the finalists in each category. The membership will then select the first and second place winners in each category.

The board discussed the need for a Treasurer. Rob appointed Ron, NKØP to write checks and pay the bills in the interim. Warren was authorized to obtain additional keys for the mailbox so as to share the mail collection duties with the new treasurer, and Ø-Beat Publisher.

Aaron, KØFLM volunteered to be the chairman of the Publicity committee. Rob appointed him with the

concurrence of the Board. The board welcomed him and pledged their support.

New Business: Les asked the board for guidance on the O-Beat mailing and association membership list. Les presented a recommended mailing list on which the Board concurred.

There was a brief discussion of recognition for prior Board members.

Harry briefed the Board on an idea to have a PPRAA test equipment pool. After a discussion period, the idea was tabled until an accurate list of the PPRAA assets could be made available to the Board.

Being no further business the meeting was adjourned.
Respectfully submitted by Warren, WØYNE, Secretary

Welcome New Members

Charles Barnett	KC7IWY	260-6074
Scott Seymour	KB0SLG	579-0571
Alfred Sontag	KA0WIE	591-0290



Dits and Bits

Estate Sale (K4UBU):

Complete Heathkit Station
SB104A Transceiver, SB604 Power
Supply/Speaker, SB614 Console, SB634
Phone Patch, and SB644A VFO. Selling as
a complete set.

Also:

SB221 Linear Amp
B&W Tuner VS300A
Icom IC225 2m mobile
Kenwood TH415A HT w/DTMF (440 mHz)
Bearcat 20/20 Scanner
Wilson rotor
5 position Antenna switch
40/80 trapped sloper antenna
2m glass mount antenna
440 mHz glass mount antenna
Contact George WB0DUM 495-3983

Hamfest Calendar

Winter Superfest III

Northern Colorado Amateur Radio Club
Saturday, 13 Jan 96 at 0900-1500
(setup at 0700)

Larimer County Fairgrounds,
Railroad Ave, Loveland

General Info: Mike Robinson AAØUB 970-
484-9196

Tables: Jeanene Gage NØYHY 303-351-
7327

VE Exams: Trent Hays WBØHZL 303-484-
8315

Admission: \$3; Tables \$8 (includes
admission)

Talk-in: 145.115(-) MHz and 146.520(s)

Misc: VE testing, food and drink, computers,
commercial exhibitors

Denver Radio League

Sunday, 26 Nov 95 at 0800-1400

JeffCo Fairgrounds, Golden, CO (near I-70
and CO-495)

General Info: Dale KE6ACP 303-360-5198

Admission: \$3.00; Tables: \$8.00 in advance
or \$10.00 at the door. Table prices DO NOT
include admission.

Talk-In: 147.33(+) NO PL or 146.52(s)

Telephone Info: 303-674-5389

Tables: Guy Reed W5GR (303)-874-5389,
or Bruce Kirkpatrick KEØVR (303)-450-0076

Dayton '96 - The Dayton Hamvention starts
Thursday, May 17, 1996, and runs through
Sunday May 19, 1996.

New Column Idea

Jeff and I have been kicking around the
idea of starting a column about this day in
history of the club. My problem is that we
don't have issues of the O-Beat from earlier
times. I would be grateful for any help you
could give me. So look back in you past
issues of O-Beat and find some interesting
tidbits and let me know.

Thanks,
Renay KA0ROY

We try to make this a newsletter enjoyable for everyone. But if you from time to time find an objectionable piece please bring your newsletter to the next meeting and we'll gladly cut it out.

Top-Ten signs hamming ain't for you by Leon Fletcher, AA6ZG

10. You subscribed to QST because you like swimsuit photos.
9. You go to ham club meetings because you figure it's a good place to earn frequent-flyer points.
8. You enjoy Field Day because you like to travel.
7. You've learned to solder transistors onto a PC board but your hand tires from holding the blowtorch.
6. You've got a yacht, a country club membership, and a winter condo in Florida, but you worry about paying your ham club's dues.
5. You wonder why you never see the name of the ARRL director you voted for in the credits of TV shows or Hollywood films.
4. When your non-ham friends don't talk about DXing, QSLing, or propagation, you walk away mad.
3. You think DXCC stands for Dogs X-raying Clever Cats.
2. You liked the call the FCC assigned you, but now you can't remember it.
1. You'd rather be called a "bacon."

The ARRL Letter
Vol. 14, No. 21
November 10, 1995

CONTEST YEARBOOK

In an effort to make ARRL contest forms more quickly and easily accessible, the League offers them electronically via its automated information server (that also contains a wealth of other files). Concurrently, contest announcements in QST have become shorter and more "user friendly," aimed at acquainting newcomers with the general outline of each contest, how to operate in it, and what awards are available for participation and achievement.

Printed copies of the complete rules for all ARRL contests will be made available in a new publication called The ARRL Contest Yearbook; the 1996 edition of this booklet will be available in December, by mail, for \$5. Also included in the Yearbook are contest summary sheets, dupe sheets, zone maps, ARRL section lists, and an extensive Field Day package for clubs.

It should be noted that it is possible to participate fully in ARRL contests without obtaining the Yearbook, by downloading summary sheets and generating one's own log and dupe sheets (that are automatically generated by the contest software now widely available and used).

The ARRL's Automated Information Server is at info@arrl.org. Send a new message to info@arrl.org for each batch of requests. Each line of the message should contain a single command.

Valid INFO E-mail commands are:

help (Sends this help file);
index (Sends an index of the files available from INFO)
send <FILENAME> (Sends "FILENAME")
quit Terminates the message.

*.RLS files are the rules for the different contests; *.FRM files are entry summary sheet files that can be edited with your contest result data. Use an ASCII text editor when inserting your contest data.

Attention all PPRAA members!

Are you currently storing any Association property? If so, the PPRAA property custodian, Mike Stansberry K0TER, wants to know about it. Please give Mike a list of the property you are storing, as well as condition of the equipment.

GOVERNMENT RELEASES REPORT ON RF DANGERS

The FCC is attempting to quell the debate over whether or not radio frequency transmissions cause injury to people exposed to them. The latest issue of TV Broadcast News magazine says that the commission has released a report that deals with the possible harmful affects of close up or extended exposure.

One of the more interesting findings was one that suggests that the use of protective clothing provides – and we quote “a significant reduction in whole body RF absorption.” The study also discounts the effectiveness of personal RF monitoring devices. It says that such detectors are often deficient. It also questions the accuracy of induced current RF monitoring instruments under real world conditions.

The report was prepared by the FCC's Office of Engineering and Technology is expected to serve as the basis for any commission action to revise its guidelines concerning the amount of human exposure permissible to RF fields. Copies can be purchased for a nominal fee from the National Technical Information Service of the Department of Commerce. Their phone number is 1-800-553-6847. Specify report number PB95-253829.
STS-74

FCC SETS NEW TEST FEES FOR REIMBURSEMENTS

Effective January 1, 1996, the maximum allowable reimbursement fee for an amateur operator license examination will be \$6.07. The FCC set this amount based on the Consumer Price Index between September 1994 and September 1995 and it will be an increase from the current \$5.90.

Volunteer examiners and volunteer examiner coordinators may charge examinees for out of pocket expenses incurred in preparing, processing, administering, or coordinating reexaminations for amateur operator licenses. The amount of any such reimbursement fee from any one examinee for any one examination session, regardless of the number of elements administered, must not exceed the maximum allowable fee.

Beginning January 1 the ARRL/VEC will charge \$6.05 to each applicant (other than candidates taking Novice Class elements 1A or 2).

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Don't forget the annual Lunch Bunch Christmas party and gift exchange!

EL PASO COUNTY ROUND TABLES

VHF Round Table - Tuesday evenings at 7:30 p.m. local time on 146.58 MHz.

HF Round Table - Sunday evenings at 7:30 p.m. local time on 3990.5 kHz.

Everyone is invited to join in the fun.

Brainstorming – A Success by Doug Moloney, WBØMHP

I am still excited tonight (Friday) as I type in all the ideas that came forward in our brainstorming session at the meeting. I am especially excited how everyone got involved in "their" club. For those members who were unable to attend, we had a 7.5 minute brainstorming session to find out what everyone wanted to see our club do. Even if you couldn't make the meeting, please don't hesitate to share your thoughts as explained in the following paragraphs.

Now for the \$100 test! Assume you have \$100 to spend on any or all of the following items on the list. For example, if you like all of the ideas and want to give them all an equal portion of your \$100, you would spend \$1.72 (100 divided by 58) on each idea. Suppose you are very passionate about two ideas, you would spend \$50 on each idea.

After you return your "shopping list" we will total up all the values for each idea and sort the list according to how each idea ranked. From this list we will have a great list of topics for the club meetings. I also see some potential projects not just presentations.

Now how does the club find people to present these topics? Our club has a wealth of expertise in many, if not all, of these topics and I know many of you would enjoy presenting a topic within your expertise. So in addition to the \$100, if you see a topic you would like to present, please put your name after the topic(s) on the list. Also, if you would like to be a continuing "Elmer" on one or more of these topics, please contact Bob Armstrong, WA4SVJ.

Please bring your list to the December meeting or contact me if you will not make the meeting.

Thanks and 73,
Doug, WBØMHP

Editor's Notes

Erik Mugele, KGØXE, has been putting in some time and has come up with a World Wide Web page on the Internet for the PPRAA. It's at <http://www.rmii.com/~mugele/ppraa/>. Check it out and pass the word.

Also, our president, Rob, WB7WHT, has asked me to find out which members have email addresses. If you have an e-mail address, please send it to Rob at rollerr@usa.net.

Thanks!

Jeff Boyes, NØJLH

Topic	Dollar Amount
1.2-gHz repeater	
10-10	
160 Meters	
2-meter SSB	
6-meter operation	
Amateur Museum at Genoa	
Amateur software	
Antennas	
Antique radio equipment	
Automatic Position Reporting System	
ATV	
Balloon launches	
Campouts	
Climbing (tower)	
Computer hardware	
Computer interface	
Contesting	
Cross-band intermod	
Cross-band operation	
Data Communications	
DX	
Elmering	
EME (moon bounce)	
Emergency preparation	
Equipment supplier directory	
Foreign licensing	
Fox hunt antennas	
Global Positioning System	
Grounding	
Hamfest shopping	
High speed packet	
Hospitality	
Internet	
Kit building	
Linked repeater systems	
Low-profile antennas	
Mobile radio installation	
OSCAR	
Packet	
Phone patch	
Phonetics	
Power supplies	
Propagation	
QRP	
Radio etiquette	
Radio Repair	
RFI	
Satellite	
Skywarn	
Soldering	
Special events	
Spread spectrum	
Survival	
Test equipment	
Tower installation	
Traffic	
WX Announcements	
Other	
Total	\$100.00

Fox Hunt!

Join in the fun the second Sunday of each month at 4:00 p.m. two miles east of Castle Rock. Meet at the Lutheran Church parking lot 1.5 miles south of Hwy. 86 on Ridge Road. Talk-in: 147.555 MHz simplex.

Attention all homebrewers!

Are you interested in creating a homebrewers group? If so, contact: Scott KB0SLG 579-0571 or Carlos KB0REI 632-1589

This space could be yours!!



Remember this is your club's newsletter and with everyone working together we can make it the best yet.

Are you a horn honker?

Hans Brakob, K0HB

A lady motorist, stalled at an intersection, tried everything, as the traffic light continued to cycle. A motorist behind her began honking his horn and yelling, "Do something." Finally she walked back to the loudmouth and calmly said, "If you'll get my car started, I'll be glad to honk your horn and yell for you."

There's always a surplus of "horn honkers." Far fewer will get out and help "start the car." It takes minimal smarts or talent to find fault. But getting things done requires action — the word that separates "fixers" from the "honkers."

Those who "honk their horn" at the ARRL are examples of what I mean. They seem to think it's the job of a few folks in Newington to "save Amateur Radio." They have it wrong; the ARRL is 170,000 folks *out here* who "oughta do something." The elected folks at Newington and their staff would like nothing better than for more of us to "do something."

For instance, if you don't like what you hear on the air, help us gather the evidence to hand the FCC. Better, teach a newcomer "the right way" so we can all have more fun.

Join the Amateur Auxiliary, develop some well reasoned ideas, and present them to your Division Director. (If he doesn't listen, fun for Director yourself!) Help your local club organize training classes in good Amateur practice, or whatever else your time and talents allow.

Trust me, you'll find much that needs doing. And you'll have no time left to honk your horn. The German philosopher Goethe said: "What you can do or dream you can do, begin it; boldness has genius, power, and magic in it."

Of course, many will continue to honk horns and yell. In the end, they'll say "Somebody shoulda done something; I always told them so!"

from the April '85 Silicon Valley Emergency Communications System (Sunnyvale, CA)

"Repeater" - K6BNB, Editor, reprinted from the ARNS Bulletin, Nov. 1985

1990 Limon Tornado

Since we have just simulated a communications emergency involving severe weather in Colorado and a tornado in Limon, I think it would be interesting to hear from amateurs that were around when the real tornado hit Limon in June 1990.

If you took part in the emergency communications operations during that tornado in any fashion, or even if you just monitored the event on your radio or scanner, perhaps making a tape recording of the event, I would like to hear from you. If you know of someone that took part in the disaster, ask them these questions.

I don't know what kind of information was documented. I'm missing the August 1990 copy of QST so I don't know if anything was published about it in QST. I did look in other months around June 1990 but didn't see anything but a brief mention of it in the Section News for the Colorado Section.

To my knowledge this kind of information is not documented anywhere, but it is just the kind of information that should be documented. Are there any ECs, former ECs, or other ARES/RACES members that have written accounts of their operations and would be willing to make those accounts available to the Section?

It would be interesting to know:

1. Who participated and exactly what they did. Where did they operate from? Home? Limon? Red Cross? Other? What is an estimate of how many amateurs were involved in the event?

2. What modes of communications were used? Packet? VHF? Which repeaters? Which HF bands? Other? CB? Which ones worked? Which ones didn't?

3. What kinds of problems did you have:

a. Callup rosters and initial notification. How did you hear about the callup and how did you find out where to report?

b. Staging areas.

c. Access into the area you operated from (Limon, shelters, etc).

d. Were you prepared by having everything you needed with you? Did you require something that you didn't have? Food? Water? Proper clothing? Batteries? Enough coax or transmission line? Fuel? Other?

e. Radio equipment failures.

f. Did other equipment not work as expected? Antennas not assembled properly?

g. Intermodulation problems.

h. Human resources. Could you have used another person at your location?

i. Communications using other means? Telephones?

j. Net operations. How smoothly did people communicate with each other? Were clear frequencies available? Were net frequencies easily obtainable? That is, was it easy to find out which frequency to use to coordinate resources, welfare traffic, logistics, etc? How long did a person act as NCS before rotating people? Were frequency changes or band changes coordinated easily? Obviously we didn't have the COPLAN back then. How were frequencies coordinated when the call went out for amateur operators? Were you using 3928 and 7235 in 1990 as default statewide frequencies for ARES in 1990?

4. What other equipment did you use besides radios? Generators? Trailers? Mobile homes?

5. What kinds of antennas did you use and how effective or ineffective were they?

6. How overloaded were the other public service frequencies? Could the information you handled have been handled EFFECTIVELY via other means?

7. Which repeaters were used and how well did they perform?

8. Anything else you can think of.

1990 was a long time ago and some of the people involved have moved away from the area. If you can provide any information it would be appreciated.

Thanks. Rob, WB7WHT



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Remember the Christmas Party
and have a safe and wonderful
Holiday Season.

Membership Application
Pikes Peak Radio Amateur Association, INC.

P.O. Box 16521
Colorado Springs, Colorado 80935

Date _____

Name _____

Address _____

City _____ State _____ Zip _____

Call _____ License Class _____ Telephone _____

Are you an ARRL member? Yes _____ No _____

One year membership rates. (Year starts with the month you receive your first issue.)

Full Member \$15.00 _____ Family Membership (same address) \$18.00 _____

Over 65 \$12.00 _____ Family Both over 65 \$12.00 _____

Associate (outside El Paso or Teller Co.) \$12.00 _____ Newsletter only \$12.00 _____

Additional Names: _____ Call _____ Class _____

IF THIS IS A RENEWAL PLEASE CHECK HERE: _____

PLEASE TYPE OR PRINT CLEARLY!

Please note: Please submit a completed application form along with your check to the treasurer. This applies to new membership as well as renewals. Thank you.